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AUTHOR Forseth, Roger
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ABSTRACT

To improve the quality of instruction in composition classes at the University of Wisconsin-Superior, a project incorporating the use of word processors was instituted. The project began in the summer session of 1984 with a regular section of beginning English. Although some students experienced difficulty in learning to use the word processors, student evaluations were positive, and by the fall of 1986 all freshman composition classes will use word processors. Course syllabi have not been entirely revised, although the "theme-a-week convention" has been replaced by assignment of fewer papers with intensive revision and editing. Future developments will include hiring writing interns (advanced undergraduate English majors and other qualified students) for computer and tutorial training, instituting continuous enrollment in freshman English for those students who have failed to make the required "C", and exploring the possibility of having students purchase their own computers. It is hoped that the use of computers and writing interns in teaching composition courses will provide instructors with more time for teaching literature and doing research, as well as improving students' writing skills. A brief bibliography concludes the report. (DF)

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# CONVERTING FRESHMAN ENGLISH TO WORD PROCESSING: A CASE HISTORY

Roger Forseth
University of Wisconsin-Superior

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"I had mastered editing and it was wonderful, moving my cursor over mistakes; it reminded me of Pac-man, eating the letters."

--English 101 student

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## I

Last summer I again faced the prospect of teaching a section of freshman English. The fatalism in that sentence reflects over thirty years of the routine of teaching that demanding but frustrating course. Out of desperation, it now seems, I made a decision: to teach the course on microcomputers. I had my own computer, an Epson QX-10, and rejoiced at the ease of writing and revising it provided, and I had attended several conferences at which teaching composition with computers was discussed, but I was by no stretch of the imagination a computer expert. More accurately, I was an admirer. So I hired an assistant--who at the beginning knew little more about computers than I did--and went to work. Of necessity, we started <u>in medias res</u>. The result was a revelation! Very little preparation was necessary. I did not need to be an expert. Almost none of the anticipated problems--such as "computer anxiety," student stubbornness, or equipment breakdown--came to pass, and that dreaded session of freshman English turned out to be a joy to teach.

As a result of that experience and others over the past year,

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I now believe that word processing may well be the most important single advance in the teaching of composition since the Analytics and Rhetoric of Aristotle. The freshman English course was, I know, an exciting experience for the students, and it certainly was refreshing for the instructor, but perhaps the largest benefit has been the opening up of possibilities for curriculum changes that could not have occurred before. Perhaps the most important discovery I have made, however, is that a machine has become for me a personal assistant that paradoxically has revitalized the teaching of one of the dullest subjects known to man.

Before describing the evolution of the program now being put into place at UW-Superior, however, I feel compelled to enter a caveat. I am basically advocating word processing, not elaborate editing programs. A year ago, at the University of Minnesota's Conference on Computers and Writing, and again just last March, at the Conference on College Composition and Communication, enthusiastic presentations were made of "high-tech" applications of, for example, Bell Laboratories's "Writer's Workbench System," a fascinating series of more than twenty editing programs designed for a minicomputer.[1] It is my hunch that this trend will prove largely to be a a dead-end for most writing courses. I do not believe that most elaborate editing programs address the usual problems of the common writer, which are basically the structuring of ideas and the revising of texts. Indeed, the computer has a real danger for the humanistic academic and the intellectual that I term the "gnostic temptation": the compulsion to make a private, occult mystique out of what is, after all, essentially a rational, if immensely powerful, extension of the mind and hand.

The computer is, in short, a tool and not an epistemological mutation (see Collier, "Writing").

For the common writer the great virtue of the computer is that it simplifies, not complicates, the composing process. The insight of Alfred Bork is profound: "The principal thing that computer use does is to allow for individualized instruction".[2] Far from being dehumanizing, the machine in the writing process leads to a very personal touch; indeed intellectuals such as Sherry Turkle are even now "looking at the computer in a different light, not in terms of its nature as an 'analytical engine' but in terms of its 'second nature' as an evocative object, an object that fascinates, disturbs equanimity, and precipitates thought, and more specifically, as a machine that compels reflection of the nature of being human" (3). The computer--especially in the humanities--is no value-free thing. I am convinced, therefore, that while I am instructing my students in a more efficient and more enjoyable method of composition, I am not neglecting but rather enhancing that personal element in writing which is in the last analysis vital.

II

The University of Wisconsin-Superior, with about two thousand undergraduate students, is the smallest of the universities in the University of Wisconsin System. As such its resources are modest, but there are advantages. We do not, for example, have the 5,800 composition students and ninety-two instructors that Michigan State University has. The thought of putting a program of that size on computers is paralyzing. Our institution, on the other

hand, has about 350 frshmen, an ideal number for my plan.

I began, then, my first experiment with computers in the Summer Session of 1984 with a regular section of beginning freshman English. This was not a volunteer section; I simply told the students on the first day of class that instead of typewriters they were going to use computers. A tutorial assistant had been engaged to aid in the project, and thirteen students were introduced to the Apple II and the Bank Street Writer (BSW) word-processing program. (I chose the BSW because of its ease of use, and it has so far proved to be a good choice.) The class was essentially a literature for composition course, and the students began by composing a summary of Antigone and ended by writing a critical essay on A Doll's House. The students were strongly encouraged--but, since they were not volunteers, not absolutely required--to write their papers on the computer, record their essays on disks, and then print both early and revised versions of these essays. The student response to the experiment was positive, not to say enthusiastic: not one chose not to use the computer.[3] The following comment by one of the students catches, I believe, more accurately than statistics the essence of computer use:

> The thought of using a computer in English 101 was upsetting. After all, I could barely type, let alone operate a computer. The mere thought sent shivers up my spine, and I [even] reconsidered taking the course. . . . My first day, my first week was depressing. I went through the tutorial program three times and still couldn't remember how to . . . stop the program. . . .

> I struggled, did a lot of swearing, waving my arms frantically for Anna [the tutorial assistant]. . . . I finally typed my first paper. Turning on the printer was a great feeling. The hum and the sophisticated clicks of the machine made me smile. "I can do it," I thought, and it wasn't bad. My spending thirty-five hours . . . [toiling] over the machine was worth it. . . . I learned quickly. It was fun having my important material preserved forever on this little disk. . . . Another paper to do. Bracing myself I confronted the computer, ready for battle. To my surprise it went easier and my thoughts began to flow, letting my fingers "do the walking." I relaxed and felt creative, no more typing errors. . . . I had mastered editing and it was wonderful, moving my cursor over the mistakes; it reminded me of [Pac-man], eating the letters. (Reibold)

This student is perhaps more than ordinarily articulate, but her reaction is typical of the comments I have been receiving over the past year.

In the fall quarter of 1984-85, two other instructors[4] and I, with the aid of a full-time computer-trained assistant, taught both beginning and advanced freshman English courses and Advanced Expository Writing through word processing. In the winter quarter another advanced course, Composition for Teachers, was added to our repertoire, and in the spring quarter six sections of freshman English--this time specifically designated "word processing"--were scheduled. To sum up: in less than one year we went from no

composition classes being taught with the aid of computers to fourteen classes, and four different courses, having been so taught. Altogether we have so far put over three hundred students on computers. Our student evaluations continue to be positive,[5] and, with the aid of the university's director of planning and analysis, we are designing a project evaluation that should provide quantified data.

We have not needed to revise greatly our course syllabi, but the "theme-a-week" convention has been displaced by the assignment of fewer papers combined with intensive revision and editing. Further, unlike the University of Minnesota-Duluth, for example, we have not found it necessary--or desirable--to establish a separate word-processing course.[6] In short, my experience thus far with the use of word processing in the teaching of composition at UW-Superior tells me that the reputed technical difficulties of using word processing in the classroom are greatly exaggerated. While a computer-trained assistant to the instructor is a necessity at this time in order to free the instructor from teaching the details of computer use, neither the assistant nor the instructor need be a computer expert. It is quite likely that in the future students will have had enough previous experience with computers to make additional technical assistance unnecessary. I have also learned that a simple, "user-friendly," inexpensive word-processing program such as BSW, that allows the student to revise his work easily, is quite adequate for the task.

One possible difficulty for some institutions planning to convert their writing programs to computers should be mentioned: the necessity of suggesting to skilled teachers that they may have

to learn an additional skill and change somewhat (although not nearly as much as they anticipate) their usual way of doing things. At Superior, for instance, the English department is fully tenured. One does not order people with an average of more than twenty years of experience at a university to change the way they teach. One persuades, if one is lucky. One also must persuade the administration. So far I have been fortunate in both areas. This is, of course, a human, not a technical problem, but my feeling is that if not handled diplomatically, the human problem could present an obstacle to progress.

III

The experiment I have outlined will be continued, expanded, and refined by means of a $5,000 grant for the academic year 1985-6 from the Undergraduate Teaching Improvement Council of the University of Wisconsin System. According to the terms of the grant, UW-Superior will have all beginning freshmen--about 350 students, as I have said--writing on computers by the fall of 1986. We will also add two features to the teaching of composition not, to my knowledge, fully utilized elsewhere: student writing assistants, or interns, and continuous enrollment.

We are discovering considerable virtue in the use of what we term writing interns. We select the interns from advanced undergraduate English majors and other qualified students for computer and tutorial training. They are currently paid four dollars an hour, but we are planning to create several internships at twelve hundred dollars a year.[7] Each intern is assigned to a specific composition section and works closely with the

instructor, introducing the students--some of whom do not type--to word processing in two or three class periods in our instructional computer room, the "Apple Room," which consists of fifteen Apple IIe and II+ computers plus an instructor's terminal and console, all linked to an overhead monitor.[8] Our interns also act as writing tutors, as word-processing "experts," as theme correctors, and indeed as mentors (Held and Rosenberg; Smith). The intern, for example, does the initial theme correcting, both during the "process" of composition while a theme is still on the screen and with the "product" after it is printed. A principal problem that writing instructors have had in the past has involved time consuming and often unnecessary reading and re-reading of an entire revised manuscript; a word processor, by isolating the portions needing correction, enables the instructor or his assistant to read and evaluate the revised portions only. And we are discovering that by moving tutors out of the writing laboratory and into the classroom we are making much more efficient and effective use of their--and the instructors'--time (Bean; Collier, "Word Processor"). Thus, I am confident that by employing interns the university can increase class size and at the same time improve the quality of student writing.[9] Parenthetically, it might be observed that, though not an objective of the experiment, the recruitment of interns leads to a recruitment of English majors.

Continuous enrollment in freshman English is the other unique feature of our experiment. Our current requirement is that the student must have a "C" grade in order to pass freshman English. This means, of course, that the student who

conscientiously completes the course requirements but whose writing remains poor must repeat the entire course--sometimes more than once--and he often is unable to schedule the repetition immediately. Continuous enrollment will allow us to give the student an "Incomplete" grade and assign him to an intern who will monitor his progress in his area of difficulty until he achieves a satisfactory level of competence. The student's work will be periodically reviewed by the director of the writing laboratory or his assistant. Under this system, both academic and personal interests will be better served, and higher morale and greater student retention could well result.

IV

The introduction of the computer into the writing program at UW-Superior has been done on a shoestring. The machines in the "Apple Room" are the only ones specifically available to the English faculty and students. It has been an inexpensive experiment, too, for the student, the only cost being for disks, since the computer center absorbs all other relevant expenses. This situation, though, will have to change, for practical reasons, as more students want to do more tasks on the computer, but I am convinced that we were right to begin our computer-aided instruction as simply, modestly, and economically as we have. We have certainly avoided making the errors that we have seen elsewhere, such as the buying of expensive hardware and software that are seductively over-elaborate and often have proven unnecessary.

We have reached a point at UW-Superior, however, where a

basic planning decision must be made: should we invest in a large number of general access microcomputers or should we arrange for the students to purchase their own machines? If we opt for the latter we would be, to my knowledge, the first public non-technical university in the country to do so, and it is this option that I am recommending to our administration. When I first proposed to our Advisory Committee on Academic Computing--our principal policy and planning board--that all students be required to buy their own computers, beginning in 1986, at least no one laughed, and I am encouraged. I am now working on a preliminary proposal with our student affairs and financial aid people as well as faculty and academic administration, and I see no insurmountable practical obstacles to the idea. Indeed, it makes much sense to let computer ownership be a student responsibility, just as their typewriters, stereos, and cars now are.

If the experience of Drew University, for example, is indicative of what to expect when students are required to buy a personal computer, one can only be optimistic about such a plan. "Applications at Drew rose forty-nine per cent after the computer plan was announced, and the average scores of incoming freshmen on the Scholastic Aptitude Test rose nine points on the verbal section and nine on the mathematics section" (Turner 1). The cost of the computer, at Drew and at other institutions which require computer purchase, is usually built into the student's tuition over a four-year period. Faculty at Drew receive their computers free and may buy a second machine at the reduced student rate. The reception of this move has been enthusiastic. According to Alan Candiotti, associate professor of mathematics and director of

the academic computing program, "We are using the computer as a way to do what we already do, but do it better"(14). There are also many institutions that have taken the "route of strongly recommending, but not requiring, the purchase of a particular computer, usually one on which the institution has worked out a discount with the manufacturer"(14). In the light of Drew's experience--and that of other universities--it strikes me that a small school like UW-Superior is in an ideal position to be the first public liberal arts university to require microcomputer purchase.

V

Such is the outline, then, of the computer-aided writing program at Superior. I said at the beginning that I see the personal computer as an assistant, and I also hinted that I am less than enthralled by the traditional way of teaching writing. If I am correct that the use of computers and writing interns makes the job of teaching writing easier and more pleasant, if it improves the quality of student composition, if--and when, administrators always ask--it saves money, and if (in short) the world of writing becomes more efficient, better, and more beautiful, what do I do with all the extra time I am left with? In a capital-intensive system labor is saved--for what? Since this has been my not so secret goal, an honest answer is in order.

I do think it will be possible for the instructor, with the aid of student interns, to be responsible for more composition students than is now the case, and that the plan I am pursuing will prove cost effective. In addition--through individualized

instruction and continuous enrollment--we may well be able to eliminate our second freshman English course and go either to writing across the curriculum or to a required junior/senior writing class. The University of Minnesota-Duluth, in fact, has just inaugurated such a program. The question remains: what institutionally and personally is to be done with the time saved that will benefit the student, the instructor, and the university?

I believe my "surplus" time will be better spent teaching literature and doing research. It would be a grave error for administrators to perceive the systematic use of computers only as a way to increase instructional capacity. I, for one, want to be rewarded for my ingenuity, not saddled with another assembly line. On the other hand, the professor has an obligation to demonstrate how change improves the university.

This English professor feels an obligation to teach more literature. The study of literature is my training, and it is what I do best. It is a subject that all the current studies tell us students desperately need. To have more time to teach literature, then, was one of the prime incentives I had for getting into computers in the first place.

I also want time to do more research. That also, after all, is my training and my vocation. An unfortunate distinction has developed over the years in American higher education between teaching colleges and research universities, indeed between teaching and research <u>per se</u>. Just recently, for instance, Edward Muzik, executive secretary of The Association of University of Wisconsin Faculties, asked, "[a]re we going to emphasize research

at the expense of undergraduate education?" He then added, "great teachers ought to be rewarded as well as great researchers"(1). But this distinction is, I believe, deeply flawed. It reminds me of that most facile and erroneous of our current distinctions: consumption and production. When one teaches one "consumes" knowledge, to be sure, and when one does research one "produces" it. But these functions are no more separable than eating and working: one fuels the other. It is my opinion that this distinction has done a disservice to the undergraduate universities of the University of Wisconsin System in particular, and to higher education, in general. Our model in the "teaching universities" should not be "publish or perish," on the one hand, or pure teaching on the other; our model should be "a disinterested endeavour to learn and propagate the best that is known and thought in the world" (Arnold 3:283). That is the model of the best liberal arts colleges; it should be ours.

Specifically, I can, I am convinced, change for the better the teaching of English composition and literature, by using word processing in all writing courses at my university. As student writing improves and is more efficiently taught, there will be more time for the teaching of literature, and teachers will be freed to do the research that will indubitably expand their understanding and skills. Be that as it may, what I am personally requesting is not, I think, entirely selfish: to receive some of the benefits from the efficiencies that I have helped create.

The implications of my infatuation with the word processor are now fully revealed. The computer is, in a sense, an

assistant, a time saver; it is also, like all good technology, designed to make life a lttle easier, a little more fun. Indeed, the glory of technology properly used is that everyone benefits: one can come very close to getting something for nothing.[10]

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NOTES

[1] See, respectively, Computers and Writing--Research and Applications, April 12-14, 1984; "Computers and the Writing Process [at Colorado State University]" and "A Comprehensive Computer-Aided Program in Writing [at the University of Minnesota-Duluth]": 71, 76-77. See also Day; Bacig, Larmouth, and Risdon.

[2] See also Wresch 3. See Wilcox for an objection to Bork's position.

[3] The student course evaluation comments have emphasized only one real drawback: the fact that they must check the BSW disk out of the library. Indeed, "getting the software to the hardware" can be an annoying problem. We are planning a solution by putting a number of free-access microcomputers in the library.

[4] Norman Christensen, director of the writing laboratory, and Deane Minahan, director of freshman English. Professor George Gott of the English department has since joined us.

[5] I am having the participating students surveyed by questionnaire twice each quarter. The data are in the process of being evaluated. We are planning a follow-up of the students through their undergraduate careers, both as to the quality of written composition and to the efficacy of computer use.

[6] "Incoming UMD students . . . will be required to take . . . two new courses--'Word Processing for Writing' and 'College Writing.'" . . . 'The first course is an incredible course for writers . . . ; because students will know word processing, they can use computer-assisted instruction to help them learn to think and write. [UMD] will use logic exercises to lead into writing and everything that has to be turned in must be word processed. I

don't think there is anything else like it in the country" ("Computer Age" 1). "Freshman English teachers will use computer programs to help students learn how to organize and write essays. . . . For example, one computer program students will use gives them practice in the skills needed to write an argumentative essay. . . . 'Students will take excerpts from articles already in the computer, combine them into clusters that represent paragraphs, then write logical claims. They will, in essence, have sketched out an essay in the order that we know good writers do'" (Hanson 2). See, also Bacig, Larmouth, and Risdon.

[7] Undergraduate internships are an increasingly valuable resource for the university and a useful form of learning for the student. There are dangers, as the following letter to the New York Times cautions: A "massive subminimum-wage program . . . exists, apparently outside the control and jurisdiction of the Department of Labor. What congressman, district attorney or state legislature is without 'interns'? These programs are on the surface far more exploitive than the Adminstration's modest plan--many interns get no wages at all. Yet these jobs are popular and intern positions hard to get. For they provide experience in the real world. But they are generally limited to college students preparing for law, journalism, public employment or other favored occupations" (Lurie 22E). Nevertheless, in my judgment everyone gains from the internships I am describing.

[8] Dr. Allen Anway, coordinator of instructional computing at UW-Superior, describes the "Apple Room" as follows: "It contains sixteen Apple computers linked together with a video network. At

the front console, the teacher may: (1) look at any student screen; (2) project the teacher's screen to any student; (3) may project any screen to the big monitor at the front of the room; (4) may project any screen to all students. . . The network in the room is a video network only. The computer disk drives are not connected together in any way. Using video only results in a low cost network. Moreover, disk networks have proved costly, unreliable, non-standard, and seldom used by anyone else."

[9] Alfred Bork, of the University of California-Irvine, has urged the teacher to "go with intuition." There are no data worth anything at all on the efficacy of the instructional use of computers, he says, but most of those who have had experience have a good idea it is working well. Kristina Johnson, Duluth Area Vocational-Technical Institute, adds: "One would have thought that improved writing should be the only criterion for determining whether or not a word processor is used, but this is often the least-discussed aspect of such a change. . . . I do not believe that the use of a word processor will magically turn a bad writer into a good one, but I do firmly believe that it will enable students to produce the best work they are capable of with a minimum of frustration" (2-3).

[10] A portion of this paper was read at the "Conference on Personal Growth Through Professional Development," sponsored by the University of Wisconsin System Undergraduate Teaching Improvement Council. University of Wisconsin-Stevens Point. April 19, 1985.

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